

REMARKS

Claims 1 through 10 are pending in this application. Claims 1 and 5 are being amended, and claims 8 through 10 are being newly added by this amendment.

I. OBJECTION TO THE SPECIFICATION

The Examiner objected to the Abstract for not using proper language and format, and for containing more than one paragraph. Those informalities have been corrected.

II. CLAIM REJECTION UNDER 35 U.S.C. § 103

Claims 1 through 7 were rejected under 35 U.S.C. § 103(a) for alleged unpatentability over Kurtenbach *et al.* U.S. Patent No. 6,414,700 and Foster U.S. Patent No. 6,211,870.

The instant invention is directed to an apparatus for controlling a TV system or video display by means of "hotkeys" chosen by a user.

Kurtenbach is directed to a graphical user interface (GUI) that allows access to a large number of commands without subjecting the user to information overload; provides a single interaction technique allowing grouping by function; and has an interface that is used in essentially the same way by novices and experts. The GUI is characterized by pop-ups include menu bars and marking menu zones where the menu bars overlap the zones. The menu bars are positioned around a central marking zone with the application menu bar positioned outermost and the window menu bar located innermost. The menu bars are arranged in a "stair step" pattern and commands are spread uniformly or justified within each menu bar. The zones form a visual square and are divided into a central zone and four outer zones where user customizable marking menus are activated when a mouse

button is held down while the cursor is in one of the zones.

Foster is directed to a portable hand-held remote control unit device with an editing system which may be utilized for selecting designated functions in several remotely controllable multimedia processing units.

Claim 1

Paper No. 3 asserts that: "It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the hotkey actuations taught by Foster with the GUI coupled with hotkeys taught by Kurtenbach. Doing so gives the user greater flexibility in establishing personalized hotkeys."

A. Ordinary level of skill

Although this rejection is based on what is alleged to be the ordinary level of skill in the art, the office action and record do not contain any findings based on substantial evidence as to the ordinary level of skill in the pertinent art. In *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999), the Federal Circuit overturned an obviousness rejection by the Board because of its failure to make the kind of obviousness legal analysis that the Supreme Court commanded in *Graham v. John Deere Co.*, 376 U.S. 1, 17-18 (1966). Such a legal analysis must begin, the Federal Circuit has consistently held, with making specific findings of fact regarding the level of ordinary skill in the art. Thus the *Dembiczak* decision held that an obviousness rejection must be reversed if, like the instant rejection, it fails to contain "specific findings of fact regarding the level of ordinary skill in the art." 175 F.3d at 1000-01, 50 USPQ2d at 1618. In addition, the findings that the PTO makes on the ordinary level of skill must be supported

by substantial evidence of record. *In re Kaplan*, 789 F.2d 1574, 1580, 229 USPQ 678, 683 (Fed. Cir. 1986) (“Even if obviousness of the variation is predicated on the level of skill in the art, prior art evidence is needed to show what that level of skill was.”).

Thus, the rejection in this office action lacks findings and analysis that the Federal Circuit considers essential to support a rejection based on ordinary skill in the art. In addition, the rejection in office action lacks substantial evidence of record to support such findings, even if they had been made.

B. Teaching, suggestion, or motivation to combine

The office action does not contain findings to support existence of a specific teaching, suggestion, or motivation in the prior art to combine Foster and Kurtenbach. The only statement made in the office action is, “Doing so [combining references] gives the user greater flexibility in establishing personalized hotkeys.”

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, it must establish on the record that some specific suggestion, motivation, or teaching is found in the prior art which would have led an ordinary artisan to select those specific references and to adapt and combine them in the same way that the inventor did. *Karsten Mfg. Corp. v. Cleveland Gulf Corp.*, 243 F.3d 1376, 1385, 58 USPQ2d 1286, 1293 (Fed. Cir. 2001) (“In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention.”); *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614 (Fed. Cir.

1998) (teaching or motivation or suggestion to combine is an “essential evidentiary component of an obviousness holding”); *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546, 48 U.S.P.Q.2d 1321 (Fed. Cir. 1998)(“There must be a teaching or suggestion within the prior art, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to particular sources of information, to select particular elements, and to combine them in the way they were combined by the inventor.”); *In re Rouffet*, 149 F.3d 1350, 1355, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998); *In re Chu*, 66 F.3d 292 (Fed. Cir. 1995); *Heidelberger Druckmaschinen AG v. Hantscho Commercial Prods., Inc.*, 21 F.3d 1068, 1072 (Fed. Cir. 1994)(“When the patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination.”); *In re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1943-44 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1586, 1589-90 (Fed. Cir. 1988); *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 U.S.P.Q.2d 929, 933 (Fed. Cir. 1984).

The statement that combining the references “gives the user greater flexibility in establishing personalized hotkeys” does not satisfy the requirements of the Federal Circuit’s case-law, particularly *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002), for a teaching, suggestion, or motivation. That statement does not refer to any specific teaching, suggestion, or motivation in the prior art. At best, it says that combining the references would provide the benefits that Choi’s specification teaches. But that is pure hindsight. The office action provides no explanation, other than stating the benefits that accrue once

the combination of elements is made, why an artisan not knowing of Choi's teachings would be motivated by something already in the prior art to go to Foster and Kurtenbach and select particular elements from them in order to devise Choi's combination of elements. The office action contains no specific, particular finding "as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed," as required per *Lee*, 277 F.3d at 1343, quoting *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

The rejection of claim 1 is therefore not supported and should be withdrawn.

Claims 2-3, 5-7

The rejection of claims 2-3 and 5-7 is not supported for the same reasons as stated for claim 1.

Claim 4

The rejection of claim 4 is not supported for the same reasons as stated for claim 1. The statement is made that: "Doing so [combining the references] gives the user the ability to customize video and audio output control keys." A statement of what the invention does is not a teaching, suggestion, or motivation in the prior art for making the combination of references. Giving the user that specific ability is the teaching only of Choi's specification. That teaching cannot be used against Choi, as the Federal Circuit held in the *Lee* case, *supra*.

III. NEW CLAIMS

New claim 8

New claim 8 is recited in means-plus-function format. It corresponds generally to claim 1, but is directed more narrowly to a TV system. As a claim in means-plus-function format, the claim incorporates by reference the structures described in the specification that correspond to the respective recited functions and equivalents thereof. *Chiuminatta Concrete Concepts v. Cardinal Indus., Inc.*, 145 F.3d 1303, 46 U.S.P.Q.2d 1752 (Fed. Cir. 1997).

The structure described in the specification is concededly not anticipated by any reference of record. Further, nothing in the prior art of record provides a specific teaching, suggestion, or motivation to combine selected elements of Foster and Kurtenbach in the manner that Choi combined those selected elements. Therefore, the subject matter has not been shown to be obvious over the cited references.


New claims 9-10

These claims depend from allowable claim 8 and therefore are allowable.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited.

A fee of \$84.00 is incurred by the addition of one (1) independent claim in excess of 3. Applicant's check drawn to the order of Commissioner accompanies this Amendment. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



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MARKED-UP VERSION OF AMENDMENTS

IN THE ABSTRACT

Please amend the Abstract, as follows:

A video display apparatus having user-selected hotkey functions and a method of using them is disclosed in which a function of the video display system can be changed by a user. Information on a menu item is selected by a user from an OSD menu which the video display apparatus has [is] stored in a memory unit as hotkey button information. The information is read from the memory unit to be executed whenever the user selects a given hotkey button. The hotkey button information may be re-set according to the user's desires, so that the user controls the functions of the video display apparatus with more ease and convenience.

IN THE CLAIMS

Please amend claims 1 and 5, as follows, and add new claims 8 through 10 as set forth above:

1 1. (Amended) A video display control apparatus having hotkeys for a user to
2 invoke and control a function of a video display apparatus, said function represented by a
3 menu item from an on-screen display (OSD) menu, said video display control apparatus
4 comprising:

5 a button unit comprising a hotkey button adapted for generating a key signal
6 corresponding to a menu item of an OSD menu;

7 a memory unit coupled to the button unit, and adapted for storing
8 information concerning OSD menu items;
9 an OSD unit for outputting an OSD character display signal to a video
10 processing unit in response to said key signal, whereby actuation by a
11 user of said hotkey button causes a screen display of one or more OSD
12 characters; and
13 a control unit for receiving said key signal from said button unit; for reading
14 information concerning an OSD menu item stored in the memory unit,
15 when said key signal is received; and for thereupon sending a control
16 signal to the video display apparatus to control a function thereof.

1 5. (Amended) A method of controlling a function of a video display apparatus,
2 said method comprising the steps of:

3 (1) when a user selects a menu item of an on-screen display (OSD) [OSD] menu
4 screen by causing generation of a hotkey button signal, determining whether a hotkey
5 signal setting exists therefor;

6 (2) when no hotkey signal setting exists therefor, executing a control function in
7 response to the hotkey button signal; and

8 (3) when a hotkey signal setting exists therefor, setting the user-selected menu item
9 of the OSD menu screen responsively to the hotkey button signal.